Changes in Default Target Levels and Risk-Based Target Levels

The attached tables provide a comparison for some chemicals of the February 2005 version and the May 2006 Default Target Levels (DTLs) and Risk-Based Target Levels (RBTLs) in the draft Departmental Missouri Risk-Based Corrective action (MRBCA) Technical Guidance The Cleanup Levels for Missouri (CALM) values are also included in the tables as a point of reference. However, please note that the CALM values are not consistent with the pathways presented for the MRBCA numbers. The list of chemicals is meant to be representative of those found on site of examples of those whose values changed; however, petroleum-related chemicals are not used in these tables.

Each table includes (i) equivalent CALM values if available, (ii) February 2005 values, (iii) May 2006 values, (iv) comparison of May 2006 values with February 2005 values, and (v) the reason for the change. Note that each table is one page.

Following is the list of changes incorporated in May 2006 values:

1. Changes in toxicity values for several chemicals
2. Adoption of USEPA's Risk Assessment Guidance for Superfund (RAGS) Part E
    - Changes in equations
    - Inclusion of dermal contact scenario for domestic water use
    - Changes in skin surface area
    - Changes in soil adherence factor
    - Changes in dermal absorption factor
3. Change in inhalation rate of construction worker
4. Changes in soil-water partition coefficients for metals

For further explanation and details, refer to the memo "Changes in Calculation of Tier 1 Risk-Based Target Levels for Departmental Missouri Risk-Based Corrective Action Technical Guidance, September 12, 2005, Information for Risk-Based Remediation Rule Workgroup" available at ***http://www.dnr.mo.gov/alpd/hwp/mrbca/mrbca.htm***

List of Tables

The following tables are included and each table is one page:

- Groundwater (indoor inhalation)
- Groundwater (dermal contact)
- Groundwater (domestic water use)

Tables 8 – 11 Changes in RBTLs for Non-residential Land Use, Soil Type 1 (Sandy) for the each of following pathways:

- Surficial soil (ingestion, inhalation, and dermal contact)
- Subsurface soil (indoor inhalation)
- Groundwater (indoor inhalation)
- Groundwater (dermal contact)

Tables 12 – 14 Changes in RBTLs for Construction Worker, Soil Type 1 (Sandy) for the each of following pathways:

- Soil (ingestion, inhalation, and dermal contact)
- Groundwater (outdoor inhalation)
- Groundwater (dermal contact)

Soil Type 2 (Silty)

Tables 15 – 19 Changes in RBTLs for Residential Land Use, Soil Type 2 (Silty) for the same pathways as listed in Tables 3 – 7

Tables 20 – 23 Changes in RBTLs for Non-residential Land Use, Soil Type 2 (Silty) for the same pathways as listed in Tables 8 – 11

Tables 24 – 26 Changes in RBTLs for Construction Worker, Soil Type 2 (Silty) for the same pathways as listed in Tables 12 – 14

Soil Type 3 (Clayey)

Tables 27 – 31 Changes in RBTLs for Residential Land Use, Soil Type 3 (Clayey) for the same pathways as listed in Tables 3 – 7

Tables 32 – 35 Changes in RBTLs for Non-residential Land Use, Soil Type 3 (Clayey) for the same pathways as listed in Tables 8 – 11

Tables 36 – 38 Changes in RBTLs for Construction Worker, Soil Type 3 (Clayey) for the same pathways as listed in Tables 12 – 14